

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A variable gain amplification circuit comprising:

a signal generator having an output load part comprising a variable resistor or a variable inductor, and an output terminal;

a variable capacitor connected ~~to~~ between said output terminal and an AC grounded terminal; and

a control circuit operable to control an output amplitude of said signal generator and a capacitance value of said variable capacitor,

wherein said control circuit controls the capacitance value of said variable capacitor so ~~that~~ as to make a cutoff frequency or a resonance frequency of said signal generator ~~becomes~~ constant.

2. (Currently Amended) A variable gain amplification circuit as defined in Claim 1,

wherein said signal generator includes ~~[[a]]~~ the variable resistor at ~~[[an]]~~ the output load part thereof.

3. (Currently Amended) A variable gain amplification circuit as defined in Claim 1,

wherein said signal generator includes ~~[[a]]~~ the variable inductor at ~~[[an]]~~ the output load part thereof.

4. (Previously Presented) A variable gain amplification circuit as defined in Claim 1,

wherein said signal generator comprises:

a variable gain mixer having a first input terminal and a second input terminal;
an RF signal source connected to said first input terminal of said variable gain mixer; and
an LO signal source connected to said second input terminal of said variable gain mixer.

5. (Previously Presented) A variable gain amplification circuit as defined in Claim 1,
wherein said signal generator comprises:

a variable gain amplifier having a first input terminal; and
an RF signal source connected to the first input terminal of the variable gain amplifier.

6-14. (Canceled)

15. (Previously Presented) A variable gain amplification circuit as defined in Claim 5,
wherein said RF signal source has a signal band equal to or larger than 100MHz.

16. (New) A variable gain amplification circuit comprising:
a signal generator having an output load part comprising a variable resistor or a variable
inductor, and an output terminal;

a variable capacitor connected between said output terminal and an AC grounded
terminal; and

a control means for controlling an output amplitude of said signal generator and for
controlling a capacitance value of said variable capacitor so as to make a cutoff frequency or a
resonance frequency of said signal generator constant.

- 17. (New)** A variable gain amplification circuit as defined in Claim 16,
wherein said signal generator includes the variable resistor at an output load part thereof.
- 18. (New)** A variable gain amplification circuit as defined in Claim 16,
wherein said signal generator includes the variable inductor at an output load part thereof.
- 19. (New)** A variable gain amplification circuit as defined in Claim 16, wherein said
signal generator comprises:
a variable gain mixer having a first input terminal and a second input terminal;
an RF signal source connected to said first input terminal of said variable gain mixer; and
an LO signal source connected to said second input terminal of said variable gain mixer.
- 20. (New)** A variable gain amplification circuit as defined in Claim 16, wherein said
signal generator comprises:
a variable gain amplifier having a first input terminal; and
an RF signal source connected to the first input terminal of the variable gain amplifier.
- 21. (New)** A variable gain amplification circuit as defined in Claim 20, wherein said RF
signal source has a signal band equal to or larger than 100MHz.